



Regulatory Finance Concepts Educational Seminar

Session 3: The Cost of Debt

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Carl Pechman, Ph.D.
Director – National Regulatory Research Institute
NRRI
www.nrri.org



The importance of credit quality

Credit quality is the ability to pay debt:

- A bond rating s the measures the credit quality of a company.
- A FICO score is measures an individual's credit quality – analogous to bond rating for corporations.
- Credit rating agencies—such as Fitch, Moody's and Standard & Poor's—evaluate the credit quality of companies.



Bond Credit Ratings Measure Credit Quality

Credit Risk	Moody's* Standard & Poor's** Fitch Ratings**		
Investment grade			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (strong)	A	A	A
Medium grade	Baa	BBB	BBB
Not investment grade			
Lower medium grade (somewhat speculative)	Ba	BB	BB
Low grade (speculative)	B	B	B
Poor quality (may default)	Caa	CCC	CCC
Most speculative	Ca	CC	CC
No interest being paid or bankruptcy petition filed	C	D	C
In default	C	D	D

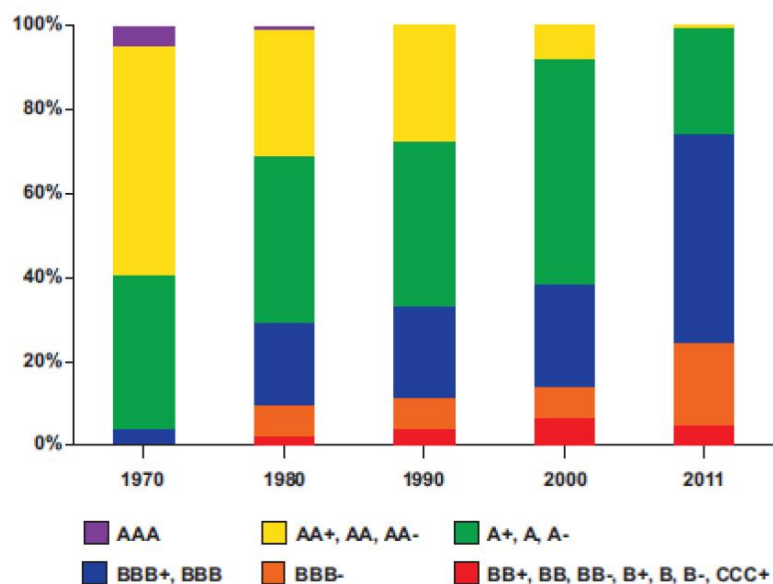
Source: <https://investinginbonds.com/learnmore.asp?catid=5&subcatid=19&id=190>



Trend in decline of utility credit quality – there's been improvement

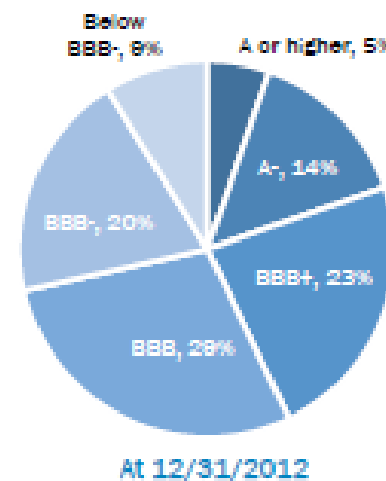
Electric utility industry credit ratings distribution evolution

(S&P Credit Ratings Distribution, U.S. Shareholder-Owned Electric Utilities)

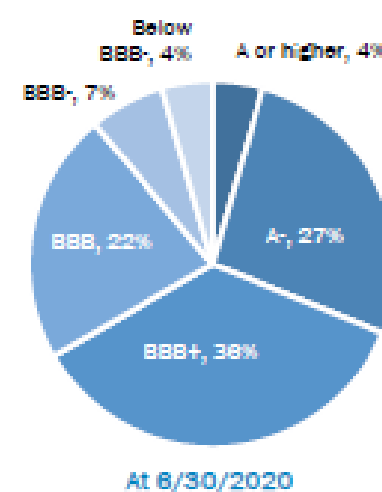


Source: Standard & Poor's, Macquarie Capital

Source: Reproduced from Peter Kind, "Disruptive Challenges: Financial Implications and Strategic Responses to a Changing Retail Electric Business," prepared for Edison Electric Institute, January 2013.



At 12/31/2012



At 8/30/2020

Source: EEI Credit Ratings Q2 2020

Corporate Rating Methodology

Corporate rating is based on:

- Anchor Rating
 - Business Risk Profile
 - Financial Risk Profile
- Modifiers: Diversification, Liquidity, Governance, etc.
- Group Rating

Source: S&P Global Ratings Corporate Methodology, November 19, 2013
<https://www.spratings.com/scenario-builder-portlet/pdfs/CorporateMethodology.pdf>

Rating Methodology for Utilities

- Anchor
 - Business Risk Profile
 - Competitive Position
 - ~~Competitive~~ Regulatory Advantage
 - Other factors
 - Country and Industry Risk
 - Financial Risk Profile
 - Cash Flow/Leverage (Accounting Adjustments)
 - Credit Ratio Benchmark Tables
- Modifiers
- Group Rating
 - Insulated Subsidiaries

Source: Ratings Methodology for Utilities, Todd A. Shipman, Presentation to CPUC, May 21, 2015
[www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman\(1\).pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman(1).pdf)

Business Risk Profile

- Economic fundamentals
 - Diversity of sales
 - Service territory economy
- Industry risk
 - Competitive risk
 - Risk of decline in economy
- Market position
 - Level of Rates
 - Affordability of rates
- Organizational risk
 - Environmental liabilities
 - Nature of assets



Financial Risk Profile

- Coverage is a measure of the utility's ability to service debt and meet financial obligations. The higher the coverage ratio the more capable of servicing debt
- Liquidity is access to cash required to run the business
- Debt and liabilities – are an indication of what the utility owns
 - Liabilities may be purchase power agreements for which the utility has contractual obligations

Regulatory Advantage

- Assesses business characteristics affected by regulation, including:
 - Regulatory stability
 - Recoverability of operating and capital costs
 - Timeliness of cost recovery
 - Recovery of unexpected costs
 - Ability to attract long-term capital
- Greater weight placed on regulatory advantage for utilities than on competitive advantage for other sectors

Source: Ratings Methodology for Utilities, Todd A. Shipman, Presentation to CPUC, May 21, 2015
[www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman\(1\).pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman(1).pdf)



Accounting Adjustments

- Imputed debt for long-term PPAs of integrated electric utilities
- Seasonal inventory effects associated with pre-season natural gas build-up
 - Short-term debt removed from capital structure
- Securitized debt
 - Debt and associated revenues and expenses separated from core business
 - Only when accorded specialized recovery by statute or rule

Source: Ratings Methodology for Utilities, Todd A. Shipman, Presentation to CPUC, May 21, 2015
[www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman\(1\).pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman(1).pdf)

Benchmarking and Group Rating

- Aspects of regulated business used as criteria to assign utilities to benchmark tables
 - Percentage of operating cash flow from regulated operations
 - Strength of regulatory advantage
- Regulated entities may be rated higher than parent group if
 - Financially independent and severable; no commingling of funds
 - Subject to regulatory restrictions or active regulatory oversight
 - Parent has strategic and economic interest in preserving the subsidiary

Source: Ratings Methodology for Utilities, Todd A. Shipman, Presentation to CPUC, May 21, 2015
[www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman\(1\).pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/Thought_Leaders_Events/150521_SlidesSPCPUCMay2015_2Shipman(1).pdf)



COVID's Impact on Credit Ratings

“S&P views the economic impact of COVID-19 as a source of incremental pressure that may lead to an increasing number of downgrades and negative outlooks. This is partly because many utilities have a thin financial cushion in their credit metrics at their current rating level. S&P’s universe of North American utilities consists of about 250 water, gas and electric utilities.”

Source: https://www.eei.org/issuesandpolicy/Finance%20and%20Tax/QFU_Credit/2020_Q2_Credit_Ratings.pdf

Regulation affects credit quality

- Most obvious – higher rates improve cash flow, at cost of consumers, balance is required.
- Prudence disallowances
- Adjustment mechanisms
 - Decoupling
 - Fuel adjustment clause
- Financial support for large scale projects



The Importance of Prudence

- The Prudence Criteria determines what costs (both capital costs and operating costs are recovered in rates
- Indian Point Nuclear refueling
- Between 1981 and 1991, PUCs disallowed \$19 billion cost recovery (in present value terms, that is more than \$100 billion)
- More recently, Mississippi Power and Light entered into an agreement with the Mississippi Public Service Commission that disallowed \$6.4 billion related to failed technology at the Kemper County Power Plan lignite coal gasification facilities
- Traditionally, prudence is evaluated when a utility seeks cost recovery – i.e., when adding to rate base



Decoupling insulates utility revenues from impact of energy efficiency

- Rate issues arises because rates are designed with capital cost recovery in the variable portion of rates
- When customers conserve, the utility loses revenues for capital cost recovery
- This provides a dis-incentive for utilities to pursue energy conservation (also disincentive for customer sided solar)
- Decoupling removes disincentive by creating a tracking account for estimated lost revenues
- Tracking account is then recovered from ratepayers – making utility whole
- One of three legs of stool to encourage energy efficiency – other two legs – financial incentives and cost recovery of EE expenses



Fuel Adjustment Clause

- Relieve financial pressure on utilities between rate cases
- Classic case – oil embargoes of the 1970's
 - In first 6 months of 1973 oil prices rose from \$4.50 to 15.50 a barrel
 - While utilities had to finance the cost of higher fuels, they were able to recover before rate case
- In contrast, California utilities during the energy crisis
 - As prices spiked – utilities had to absorb the increased cost of purchase power
 - Led to the bankruptcy of PG&E



Regulatory Support Facilitated Large Capital Investments

- Around 2005 there was a significant push to build new coal plants
- State PUC's provided financial support in a number of ways
 - Pre-declarations of prudence
 - Helps insulate utility from uneconomic investments when factors change
 - Enhanced cash flow during construction
 - Return on CWIP – enhances cash flow – reduces rate shock
 - Fuel adjustment clauses reduce the risk of fuel volatility
- Regularity support improves credit quality
- Demonstrates



The ultimate regulatory decision – to allow a utility to go bankrupt

- When a utility is on the verge of bankruptcy, the PUC must determine whether to provide financial support through higher rates
- It is a weighing process
- Bankruptcy is expensive (high transactions costs)
- Regulatory authority shifts to Bankruptcy court – not a court of equity
- Search for solutions – find a financially stronger financial partner.
- Regulatory / legislative commitments